

Telephone: (508) 495-2370  
FAX: (508) 495-2258  
E-mail: pie.smith@noaa.gov

20 November, 2002

MEMORANDUM FOR: Distribution\*

FROM: Pie Smith  
SAW Coordinator

SUBJECT: 36<sup>th</sup> Northeast Regional Stock Assessment Workshop  
(36<sup>th</sup> SAW)

**36<sup>th</sup> SAW Stock Assessment Workshop (SAW) Meeting**  
**The 36<sup>th</sup> Stock Assessment Review Committee Meeting (SARC)**

Northeast Fisheries Science Center  
166 Water Street  
Woods Hole, Massachusetts  
December 2-6, 2002

**36th SAW Public Review Workshops**

New England Fishery Management Council  
January 28-30, 2003, Portsmouth, NH

Mid-Atlantic Fishery Management Council  
January 21-23, 2003, Atlantic City, NJ

The 36th SARC Panel includes: Chair, Andrew Payne (CEFAS, CIE); John Wheeler (CIE); Heath Stone (DFO); Erik Williams (SEFSC); Andrew Applegate (NEFMC); Laura Lee and Paul Piavis (ASMFC); Jerome Hermesen (NMFS/NERO); Jon Brodziak, Chris Legault, Richard Pace, and Anne Richards (NMFS/NEFSC)

The species/stocks to be addressed during SAW-36 are:

**Yellowtail Flounder  
Winter Flounder  
Northern Shrimp  
Atlantic Striped Bass**

## **Terms of Reference (TOR)**

### A. Yellowtail Flounder (for Mid-Atlantic, southern New England and Cape Cod areas)

1. Investigate stock structure of yellowtail flounder resources off the northeastern United States and identify appropriate stock units for assessment and management.
2. Characterize the commercial and recreational catch including landings and discards.
3. Estimate fishing mortality, spawning stock biomass, and total stock biomass for the current year and characterize the uncertainty of those estimates.
4. Evaluate and either update or re-estimate biological reference points as appropriate.
5. Where appropriate, estimate a TAC and/or TAL based on stock status and target mortality rate for the year following the terminal assessment year.
6. If stock projections are possible,
  - a. provide short term projections (2-3 years) of stock status under various TAC/F strategies and
  - b. evaluate current and projected stock status against existing rebuilding or recovery schedules, as appropriate.

### B. Winter flounder

*These draft terms of reference are subject to approval by the ASMFC's Winter Flounder Management Board.*

### **Terms of Reference for southern New England/Mid-Atlantic (SNE/ MA) stock**

1. Update the status of SNE/ MA winter flounder stock through 2001 providing estimates of fully recruited fishing mortality rate, biomass weighted fishing mortality rate, stock size, mean biomass, spawning stock biomass, and recruitment as appropriate. Characterize uncertainty in SSB and fishing mortality rates.

2. Provide short-term (2002) and medium term projections (2009) of catch and biomass (mean biomass, SSB) under status quo  $F$ , and ASMFC's  $F_{40\%}$ , target and NEFMC's  $F_{MSY}$ .
3. Develop research recommendations for improving assessment of winter flounder.
4. Comment on and revise, where necessary, the ASMFC and the NEFMC overfishing definitions for this stock. (Note: Currently ASMFC and the NEFMC have different overfishing definitions. The Board had recommended that the WFTC develop a single overfishing definition for this stock.)

#### Terms of Reference for Gulf of Maine (GOM) stock

1. Characterize status of GOM winter flounder using the analytical tools that are most appropriate for available data. These may include sequential population analysis, surplus production, survey indices and relative exploitation indices, or length based models.
2. Where possible provide best estimates of exploitation rates (fishing mortality, relative exploitation), mean biomass, spawning stock biomass and characterize uncertainty associated with these estimates.
3. Develop yield per recruit and biological reference points
4. Where possible, provide short-term and medium term projections of catch and stock size under status quo  $F$  and various proposed target fishing mortality rates ( $F_{20\%}$ ,  $F_{25\%}$ ,  $F_{30\%}$ ,  $F_{40\%}$ ,  $F_{0.1}$ ,  $F_{max}$ ,  $F_{msy}$ ) as appropriate.
5. Develop and recommend an overfishing definition for Gulf of Maine winter flounder that meets the standards of the Sustainable Fishery Act.
6. Develop research recommendations for improving assessment of winter flounder.

#### C. Northern Shrimp

1. Characterize the commercial and recreational catch including landings and discards.
2. Estimate fishing mortality, spawning stock biomass, and total stock biomass for the current year and characterize the uncertainty of those estimates.
3. Evaluate methodologies for the development of biological reference points for Northern Shrimp.

#### D. Atlantic Striped Bass

1. Characterize the commercial and recreational catch including landings and discards.
2. Review the VPA based stock assessment and provide guidance on determining the best, most appropriate model configuration. Provide specific guidance on plus grouping, as well as an evaluation of the fishery independent surveys and the ages on which to base the last true age F.
3. Estimate fishing mortality rates for specific components of the coastal stock complex using tagging data.
4. Discuss the validity of averaging stock specific estimates from several separate tagging programs as a means to estimate total stock exploitation.
5. Review the discard estimation methodology and the validity of using tag returns as an adjustment to the reporting rate.
6. Provide a comparison of tag and VPA derived F estimates. If possible, provide guidance on the most comparable aspects of the VPA output and the tag derived F. Also provide guidance on which of the tagging programs (or average of programs) would be most comparable to the VPA derived F.

<u>ASSESSMENT GROUP</u>	<u>CHAIR</u>	<u>SPECIES</u>	<u>MEETING DATE/PLACE</u>
<u>SAW Southern Demersal Subcommittee</u>			
	Mark Terceiro	Summer flounder	May 20-22, 2002
		Yellowtail flounder	August 29, 2002
	Mark Terceiro	SNE/MA yellowtail	Sept. 30 - October 4, 2002
<u>ASMFC Winter Flounder Technical Committee</u>			
	Steve Correia	GOM winter flounder	September 24-25, 2002
<u>ASMFC Northern Shrimp Technical Committee</u>		Northern Shrimp	November 15, 2002
<u>ASMFC Atlantic Striped Bass Tech. Committee</u>		Striped Bass	October, 2002

The SARC last reviewed SNE/MA Winter flounder (SAW 28), Gulf of Maine Winter flounder (SAW 21), SNE Yellowtail flounder (SAW 27), Cape Cod Yellowtail flounder (SAW 28), Northern Shrimp (SAW 25), and Striped Bass (SAW 26). Documentation and working papers will be forwarded to SARC members two weeks prior to the SARC meeting. The SARC will produce two reports: the "SARC Consensus Summary of Assessments," a technical summary of the analyses reviewed, with research recommendations, and a briefer summary, "Advisory Report on Stock Status." A more detailed SAW-36 SARC agenda is attached.

Information from the "Advisory Report on Stock Status," together with selected background information from the SARC Report, will be presented at the SAW-36 Public Review Workshop, as part of scheduled meetings of the Mid-Atlantic, and New England Fishery Management Councils and the ASMFC. Draft reports will be available at the Workshops and will be finalized for publication in the NEFSC Reference Document series after review and comment by the SAW Northeast Regional Coordinating Council (NECC).

**\*Distribution:**

- SAW NECC
- State Fisheries Organizations
- Members of the SARC
- NMFS Office of Science & Technology
- SAW Working Group Chairs
- Others on the SAW Mailing List

**SAW-36 SARC WORKING PAPERS**

December 2-6, 2002

NOAA/NMFS/NEFSC/Woods Hole Laboratory

SAW-36 SARC Working Papers, including the Working Group reports and other analyses, are listed below. The papers are coded by topic:

**A - Yellowtail flounder; B - Winter flounder; C - Northern shrimp; D - Striped Bass**

<b><u>Stock</u></b>	<b><u>Title</u></b>	<b><u>Author (s)</u></b>
<b>Yellowtail flounder</b>	A-1. Literature Review of Research on Yellowtail Flounder Stock Structure	S. Cadrin
	A-2. Spatiotemporal Patterns in Abundance of Yellowtail Flounder off the Northeastern United States	S. Cadrin
	A-3. Geographic variation in Growth and Maturity of Yellowtail Flounder off the Northeast United States	S. Cadrin
	A-4. Morphometric Variation of Yellowtail Flounder	S. Cadrin and V. Silva
	A-5. Exploratory Analysis of Yellowtail Flounder Larval Transport off the Northeastern United States	S. Cadrin
	A-6. Stock Assessment of Yellowtail Flounder in the Southern New England - Mid Atlantic Area	SAW Southern Demersal Working Group <sup>1</sup>
	A-7. Stock Assessment of Yellowtail Flounder in the Cape Cod – Gulf of Maine Area	SAW Southern Demersal Working Group
<b>Winter flounder</b>	B-1. Assessment of the Southern New England/ Mid-Atlantic winter flounder stock complex for 2002	ASMFC Winter Flounder Technical Committee <sup>2</sup>
	B-2. Assessment of the Gulf of Maine winter flounder Stock for 2002	ASMFC Winter Flounder Technical Committee

<b>Northern Shrimp</b>	C1. Stock Assessment Report for Gulf of Maine Northern Shrimp – 2002	ASMFC
	C-2. Draft Discussion Paper for Northern Shrimp Section to Amendment 1 to the Interstate Fishery Management Plan for Northern Shrimp – 12/18/01	ASMFC
	C-3. An Hierarchical Approach to Determining Reference Points for Pandalid Shrimp	ASMFC
<b>Striped Bass</b>	D-1. Atlantic Striped Bass Draft Advisory Report (Available after 12/4/02)	ASMFC Striped Bass Technical Committee
	D-2. 2002 Stock Assessment report for Atlantic Striped Bass	ASMFC Striped Bass Technical Committee

1. SAW Southern Demersal Working Group: F. Almeida, J. Brodziak, H. Chickarmane, L. Col, A. Hangsterfer, J. King, A. Kuzirian, C. Legault, R. Mayo, T. Nies, L. O'Brien, W. Overholtz, P. Rago, T. Sheehan, V. Silva, S. Sunderland, M. Terceiro (Chair), M. Thompson, and S. Wigley

2. ASMFC Winter Flounder Technical Committee: J. Burnett, S. Cadrin, S. Correia, L. Lee, C. Legault, A. Mooney, L. Munger, P. Nitschke, S. Sherman, D. Simpson, K. Sosebee, M. Terceiro, and S. Wigley

# **36<sup>th</sup> Northeast Regional Stock Assessment Workshop (SAW-36) Stock Assessment Review Committee (SARC) Meeting**

Aquarium Conference Room - NEFSC Woods Hole Laboratory  
Woods Hole, Massachusetts  
December 2-6, 2002

## **AGENDA**

TOPIC	WORKING GROUP & PRESENTER(S)	SARC LEADER	RAPPORTEUR
<b><u>MONDAY, 2 December</u></b> (1:00 - 6:00 PM).....			
Opening			
Welcome	<b>Terry Smith, SAW Chairman</b>		<b>Pie Smith</b>
Introduction	<b>Andrew Payne, SARC Chairman</b>		
Agenda			
Conduct of meeting			
<b>Yellowtail flounder Stock ID (A)</b>	S. Cadrin	TBA	TBA
<b><u>TUESDAY, 3 December</u></b> (8:30 - 6:00 PM).....			
<b>SNE/MA winter flounder (B)</b>	M. Terceiro	TBA	TBA
<b>Gulf of Maine winter flounder (A)</b>	P. Nitschke	TBA	TBA
<b>Northern shrimp (C)</b>	M. Hunter	TBA	TBA
Informal social (6:00 - 8:00 PM) at MBL's SWOPE Bldg.)			
<b><u>WEDNESDAY, 4 December</u></b> (8:30 - 6:00 PM) .....			
<b>SNE/MA yellowtail flounder (B)</b>	S. Cadrin	TBA	TBA
<b>Cape Cod yellowtail flounder (B)</b>	S. Cadrin	TBA	TBA
<b>Atlantic striped bass (D)</b>	A. Sharov	TBA	TBA
<b><u>THURSDAY, 5 December</u></b> (8:30 AM - 6:00 PM) .....			
Review Advisory Reports and Sections for the SARC Consensus Summary Report			
<b><u>FRIDAY, 6 December</u></b> (8:30 AM - 5:00 PM) .....			
SARC comments, research recommendations, and 2nd drafts of Advisory Reports			
Other business		P. Smith	



**The 36th NORTHEAST REGIONAL  
STOCK ASSESSMENT REVIEW COMMITTEE  
(SARC)**

**December 2-6, 2002  
Northeast Fisheries Science Center, Woods Hole Laboratory, Woods Hole, MA**

**SAW-36 Chairman  
Andrew Payne (CIE)**

**Experts from the NEFSC  
Jon Brodziak  
Chris Legault  
Richard Pace  
Anne Richards**

**Atlantic States Marine Fisheries Commission  
Laura Lee, RI  
Paul Piavis, MD**

**Regional Fishery Management Councils  
Andrew Applegate, NEFMC**

**NOAA/NMFS  
Jay Hermsen, NERO  
Erik Williams, SEFSC**

**Other laboratories, research institutions, and academia  
John Wheeler (CIE)  
Heath Stone (DFO)**

